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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,436	10/18/2001	Michael Putnam	PGI6044P0041US	6583

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
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EXAMINER

COLE, ELIZABETH M

ART UNIT PAPER NUMBER

1771

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,436

Applicant(s)

PUTNAM ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/10/05 has been entered.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 9, 11-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,430,788. Although the conflicting claims are not identical, they are not patentably distinct from each other because each discloses a lightly bonded nonwoven fabric which is hydroentangled to break bonds between the fibers without breaking the fibers.

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4. Claims 9, 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention for the reasons set forth in paragraph 2 of the previous action. Further, with regard to claim 9, it is not clear what is meant by "without substantially breaking said filaments". Does this mean that individual filaments can be broken but that a majority of filaments are not or does this mean that a majority of filaments can be damaged but not broken or severed?

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-140,148 in view of Homonoff et al, U.S. Patent No. 5,151,320 as set forth in the previous action.

Claims 9, 11-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arnold et al, U.S. Patent No. 5,707,468. Arnold discloses a spunbonded fabric which is minimally bonded in order to provide just enough integrity to the fabric to allow it to be further processed but not to detrimentally affect the web. See abstract. After the web is minimally bonded it can then be hydroentangled. Col. 4, lines 58-64. The fabric is made of continuous filament which have diameters of from 7-30 microns. It is noted that US patent 4,892,534 at col. 4, lines 1-6, shows that polyester and polypropylene fibers having a denier of about 3 have a diameter of about 35 microns. Therefore, the Arnold fibers meet the claimed denier range of 0.2 – 3 denier since it teaches a diameter of 7-30 microns. The

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spunbonded webs of Arnold have a basis weight of 5-407 gsm. See col. 7, lines 1-4.

Arnold does not specifically teach that the hydroentangling step breaks bonds without substantially breaking the filaments, however, since Arnold specifically teaches a minimally bonded spunbonded web having the same size filaments and the same basis weight, it is reasonable to presume that the hydroentangling step of Arnold would also break bonds without substantially breaking the filaments. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

See MPEP § § 2112- 2112.02

7. Applicant's arguments filed 5/10/05 have been fully considered but they are not persuasive. Applicant argues that the meaning of "relatively lightly bonded" is readily apparent to one skilled in the art because in general spunbonded are subjected to thermal bonding such as heat embossing whereas in the instant invention the fabric is only relatively lightly bonded by being subjected to light level of thermal bonding. However, the rejection is maintained because the difference between light thermal bonding and more significant thermal bonding is not set forth and therefore the metes and bounds of the claim is not clear. It is not clear what type and/or amount of bonding would be considered to relatively light and therefore the scope of the claims is not clear.

8. With regard to the combination of JP '148 in view of Homonoff et al, Applicant argues that there is no teaching or suggestion of forming a lightly bonded spunbonded

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precursor web. However, Homonoff teaches that the bond area can be as low as 3-4% to as high as 50%. It is the examiner's position that 3-4% bond area would correspond to relatively lightly bonded, as compared to other degrees of bonding, such as 50% bond area.

9. Applicant argues that JP '148 and Homonoff et al contemplate fabrics where the bonds are not intended to be broken to facilitate filament entanglement. However, Yoshimura teaches applying the water jets to the sheet to entangle the pulp sheet with the spunbonded layer and therefore this would result in at least some of the bonds in Yoshimura being broken. Applicant argues that this would also, however, result in the fibers of Yoshimura being broken because Yoshimura is not lightly bonded but conventionally bonded. However, as set forth above, Homonoff teaches lightly bonding the fabric in order to provide some integrity to the fabric. Also, it is noted that there is nothing on the record to support the contention that the degree of bonding of either Yoshimura or Homonoff is such that hydroentangling would result in breaking the filaments.

10. Applicant argues that example 1 of Yoshimura teaches that the web has been conventionally bonded. However, example 1 states that the fiber are self-fused to each other. This does not necessarily mean that the fibers have been point bonded or compressed and does not indicate the degree to which the fibers are bonded.

11. Applicant argues that Yoshimura is principally concerned with creping after hydroentanglement. However, any subsequent treatment of the web of Yoshimura is not precluded by the instant claims.

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12. Applicant argues that Homonoff fails to overcome the deficiencies of Yoshimura because it teaches away from the present invention because it states that the type of prebonding of the base is not believed to be critical and that a bond area as low as 3-4% up to about 50% bond area can be used. However, Homonoff can not teach away from the present invention by stating that the type of prebonding is not critical, since the type of prebonding, (i.e., point bonding, ultrasonic welding, hot air knife, etc.) is not set forth in the claims. Further, Homonoff teaches that the bond area can be as low as 3-4% which equates to a relatively lightly bonded spunbonded web.

13. Applicant argues that Homonoff teaches heat-setting after the material is cross-stretched. However, the instant claims do not preclude additional steps in the method.

14. Applicant argues that Homonoff does not teach breaking the bonds between the filaments without substantially breaking the bonds between the filaments. However, Homonoff is relied on for the teaching of the degree of bonding of the web, not for teachings regarding the breaking or lack of breaking of the bonds between the fibers or breaking of the fibers themselves during hydroentangling. However, if the degree of bonding controls the degree of breaking of the bonds of the fibers and breaking of the fibers themselves, since Homonoff teaches a lightly bonded spunbonded, it is reasonable to presume that the Homonoff spunbonded would behave the same way as the instantly claimed spunbonded.

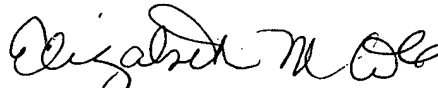
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

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Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole
Primary Examiner
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e.m.c